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[266] From: Jean H Dunkirk at ~WHC52 3/8/94 8:00AM (43280 bytes: 5 ln, 1 fl)
To: James D Bauer at ~DOE13, Donald J Carrell at ~WHC155, Paul F Jr Dunigan at
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Roger D Freeberg at ~DOE6, Dianna L Schafer at ~DOE13, Susan E Avery at ~DOE6,
Alden J Foote at ~TPA1, George W Jackson at ~WHC137, Roger J Landon at
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at ~DOE0, Thomas M Wintczak at ~WHC114, Robert G Holt at ~DOE13,
Gordon R Bilyard at ~PNL4, Stephen L Friant at ~PNL83, Nancy K Lane at
~WHC300, Robert P Henckel at ~WHC249, Regan S Weeks at ~WHC304, Stephen Weiss
at ~WHC68, Frederic A Morris at ~BSRC1, Jean H Dunkirk, Kathleen M Leonard at
~WHC155, R D (Doug) Hildebrand at ~DOE8, Michael C Hughes at ~WHC80,
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Melvin R Adams at ~WHC68, W A (Bill) Rutherford at ~DOE8, Kevin V Clarke at
~DOE13, Rue A Thomas at ~WHC57, Sandra R Moreno
cc: Linda C Tunnell at ~WHC155
Subject: Natural Resources Working Group Briefing materials
----- Message Contents -----

Text item 1:

The reminder message that was distributed yesterday
regarding the Natural Resources Issues briefing being
held today at 1:00 pm at 1100 Jadwin, Room 424 was intended
to include the attached materials which will be the subject
of the meeting. We look forward to seeing you there.

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File item 2: NRBRIEF.3 3/8/94 7:57AM

Natural Resource Working Group Briefing

- I. Introduction (KL 5 min)
- II. Status of Other DOE Sites' NR Activities & HQ Policy (KL 5 min)
- III. Status of Trustee Activities at Hanford (KL 5 min)
 - A. February 17, 1994, Meeting -- Broad based "Strategic Plan" for Trustee Council. Proposed possible vision statement and items to measure success of the group.
 - B. March 29, 1994, Meeting -- Expect to have a draft vision statement and items of measurement that each trustee can take back to their constituencies.
 - C. April 25, 1994, Meeting -- Trustees would like to meet with Mr. Reicher and let him know how the "strategic plan" process for the formation of the council is going.
- IV. Status of NR Planning at Hanford (SF 5 min)
 - A. NR Management Plan Technical Document
(Inventory of Site Natural Resources)
 - B. Sitewide Conceptual Work
(Framework for performing ecological risk assessments)
 - C. Natural Resources Working Group Project
(Analysis of issues and Action alternatives)
 - D. NR Management Plan
(Plan for implementation of recommendations in Technical Document and Working Group Report)
- V. Natural Resources Working Group Project (JD 20 Min)
 - A. Mission
 - B. Goals
 - C. Operating Process/intended product of working group
 - D. Issues and Action options
 - E. Schedule
 - F. Request for input/direction

**NATURAL RESOURCE WORKING GROUP:
PURPOSE AND SCOPE OF WORKING GROUP**

A. MISSION: Evaluate Options.

Develop and evaluate options for consideration by DOE to fulfill its natural resource trustee duties under CERCLA and related statutes, consistent with its owner/operator and lead agency obligations. Report to DOE the advantages and disadvantages of those options and make recommendations.

B. GOALS: To Be Met By Recommendations

(These proposed goals are those of assumed importance to DOE-RL. We request RL to advise us whether we have correctly stated RL's goals, and whether they should be weighted equally for purposes of evaluating alternatives, or should be viewed hierarchically, for example, in three groups [1-2, 3-5, and 6-8]).

1. Fulfill DOE's NR Trustee responsibilities
2. Minimize costs and liabilities
3. Provide maximum benefit to natural resources consistent with other goals
4. Avoid negative impact on site cleanup
5. Maximize use of and integration with existing programs/information
6. Gain concurrence of other Trustees
7. Gain concurrence of lead agencies (EPA, Ecology)
8. Gain public acceptance of actions/programs/policies

C. OPERATING PROCESSES FOR THE WORKING GROUP

1. Internal Working Processes

a. Assumptions

NRDA intersects legal, economic, social, and technical issues. In most cases, issue resolution must consider two or three of these domains.

Most potential solutions to NRDA issues will have both advantages and disadvantages relative to DOE goals. The difficult decisions will lie in determining how to manage the disadvantages.

b. Procedural Steps

As needed, the Working Group will divide into smaller subgroups to address specific issues or groups of issues. Subgroups will evaluate specific issues and develop recommended courses of action. The full Working Group will make the ultimate decisions,

however. Subgroups will disband after they have addressed the issues they were charged with, and after they have worked with the full Working Group to decide on a course of action or recommendation. As needed, subgroups having different compositions will be formed and disbanded throughout the process.

- 1) Draft a proposed scope of NR considerations on the Hanford Site, on which this committee should be focussed. The subgroup already charged with this activity will make an initial recommendation and provides a rationale for that recommendation. The scope of the NR issues will be open to discussion and refinement during the course of the group's activities.
- 2) Identify all relevant issues. This is a Working Group activity.
- 3) Group all issues into logical larger sets of issues. Given that many issues will be related to greater or lesser degrees technically, legally, and economically, it should be possible to group issues into related subsets, and then work to develop options and recommendations for the defined sets of issues. Hence, the third step will be to group the full set of issues into logical, highly related groups of issues. This is a Working Group activity.
- 4) Prioritize groups of issues for action. This is a Working Group activity.
- 5) Act on highest priority sets of issues. Having defined and prioritized the sets of issues, subgroups from among the staff of the full Working Group will be formed. Each subgroup will be assigned a top priority issue group. Subgroups will work in parallel to develop options, recommendations, and rationales. This is an iterative process, whereby results of the first set of options, recommendations, and rationales are open to modification later as subsequent issue groups are addressed.
- 6) The products of the subgroups are discussed and modified/agreed to by the larger working group before proceeding on to the next set of issues.
- 7) When all issue groups have been addressed, the total Working Group will hold a 1-2 day workshop to draft logical sets of policy options for DOE-

RL. Each of these sets of options will include recommendations and rationales for those recommendations that hold together for the set.

- 8) Prepare draft report and submit to DOE-RL for comments. Group activity.
- 9) Prepare final report. Group activity.

2. Communications

a. Internal Communications

1. Periodic meetings: at the close of each meeting, the date of the following meeting will be determined.
2. Phone, fax, and cc:mail, as per usual. A master list of the Working Group's phone and fax numbers and mail stops, will be generated. When subgroups are formed, the names and phone numbers of the members of that group will be distributed. Additionally, the name and phone number of the support secretary of each member will be distributed.

b. External Communications

1. Meeting minutes will be prepared within 2 days of the meeting, and will be distributed to group members for 24 hour review, and then to R.G. Holt, J.D. Bauer, D.J. Carrell, P.F. Dunigan, R.H. Engleman, J.K. Erickson, R.D. Freeberg, A. Foote, G.W. Jackson, R.J. Landon, P.J. Mackey, R.K. Stewart, P.W. Willison, and T.M. Wintzcak. Other site personnel (e.g., DOE-ER staff) may receive minutes of meetings on a case by case basis, as agreed to by members of the working group. Linda Tunnell will attend all meetings to take notes and prepare the minutes.
2. Bob Holt and other site staff will be briefed periodically on progress and recommendations of the working group, as appropriate (Bob Holt will be briefed on all occasions, to maintain continuity). Briefings will occur at logical points in the process of developing recommended options. There will be a general briefing including, at a minimum, all of the recipients of the meeting minutes, to discuss the project upon completion of the draft project outline.

3. Deliverables to DOE-RL will include: a draft annotated outline of the report; a draft report; and a final report (that includes and responds to DOE-RL and WHC comments).

D. SCHEDULE (TBD)

**NATURAL RESOURCES WORKING GROUP:
PROPOSED OUTLINE OF DOCUMENT**

I. INTRODUCTION

A. PURPOSE OF DOCUMENT

B. BACKGROUND AND SCOPE OF EVALUATION

1. Legal

- a. CERCLA Natural Resource Liability, Section 107(f) (Trustee obligations, Owner/operator obligations, Lead Agency obligations)
- b. Statutes/Regulations closely connected to CERCLA NR, to the extent that they are related: NEPA, SEPA, ESA, CERCLA Response Action Provisions, RCRA Corrective Action Provisions

2. Scientific

- a. Integration of Risk Assessment Methodology and Injury Determination Methodology
- b. Linking Natural Resources to Hazardous Substance Releases
- c. Affected Resources

3. Economic

- a. Restoration Costs
- b. Compensatory Values of lost services
- c. Restoration Alternative cost estimates

4. Stakeholder Acceptance (Values and Perceptions) including: DOE, EPA, Washington Dept. of Ecology, Trustees, Public

C. INTENDED USE OF DOCUMENT

D. DEFINITIONS

1. GENERAL

- a. Natural Resources Under CERCLA, Natural Resources are defined as "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to,

managed by, held in trust by, appertaining to, or otherwise controlled by the United States . . . , any State or local government, any foreign government, [or] any Indian tribe." (42 USC Section 9601(16))

b. **Release** CERCLA defines a Release as any "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, or other closed receptacles containing any hazardous substance or pollutant or contaminant). (42 USC Section 9601(22).) The CERCLA definition of release specifically excludes: (1) releases involving only workplace exposures for which the exposed persons may assert a claim against the employer, (2) emissions from the engine exhaust of certain transportation vehicles, (3) releases of source, byproduct, or special nuclear material from either a nuclear incident covered by the Price-Anderson Act or a processing site being addressed by the uranium mill tailings program, and (4) the normal application of fertilizer.

c. **Damages** CERCLA requires Natural Resource Trustees to "assess damages for injury to, destruction of, or loss of natural resources," and to "recover for such damages." (42 USC 9607(f)(2).) DOI has adopted optional regulations which define "injury" as the impact of a release on a natural resource, and "damages" as the amount of money sought by trustees to compensate for the injury. (43 CFR Section 11.14(1).) Recoverable "damages" include both the value of the injury and the reasonable cost of assessing the injury. (42 USC 9607(a).)

d. **Injury** CERCLA Natural Resource liability arises when a release of a hazardous substance causes injury to, destruction of, or loss of natural resources. (42 USC Section 9607(a), (f).) Neither CERCLA nor the National Contingency Plan (NCP) specifically define the term "injury." The DOI optional damage assessment regulations define injury as a measurable adverse change, either long-term or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a hazardous substance release or to a product of reactions resulting from such a release. (43 CFR 11.14(v).) In addition, the DOI regulations further define injury by reference to specific numerical standards for surface water, ground water, air, geologic, and biological resources.

e. **Services** The DOI regulations define "services" as the physical and biological functions performed by natural resources, (including the human uses of those functions) as a result of the physical, chemical, or biological quality of the natural resources. (43 CFR Section 11.14(nn).) Examples include onsite recreation; mining; timber production; use of water for irrigation, water supply, or power production; and use of natural

resources by biological resources for food or shelter. Restoration can be measured a return of services to baseline level.

f. **Exclusions** CERCLA includes four important exclusions from natural resource liability: (1) the EIS exclusion, (2) the wholly before 1980 exclusion, (3) the pesticide product exclusion, and (4) the exclusion for federally permitted releases.

1. **EIS Exclusion** CERCLA provides an exclusion from natural resource liability where (a) the damages were specifically identified as an irreversible and irretrievable commitment of natural resources in an environmental impact statement, or other comparable environment analysis, and (b) the decision to grant a permit or license authorizes such commitment of resources, and (c) the facility or project was otherwise operating within the terms of its permit or license. (42 USC 9607(f)(1).)

2. **Wholly Before 1980 Exclusion** CERCLA excludes natural resource liability where the release and the resulting damages occurred wholly before CERCLA was enacted on December 11, 1980. (42 USC Section 9607(f)(1).)

3. **Pesticide Application Exclusion** CERCLA excludes natural resource liability for any damages resulting from the application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act. (42 USC Section 9607(i).)

4. **Federally Permitted Release Exclusion** CERCLA excludes natural resource liability for damages resulting from federally permitted releases. (42 USC Section 9607(j).) CERCLA defines a "federally permitted release" to be a release which is permitted pursuant to an (i) NPDES permit, (ii) Clean Water Act Section 404 dredge and fill permit, (iii) RCRA TSD permit, (iv) Ocean Dumping permit, (v) Underground Injection Control permit, (vi) Clean Air Act permit, (vii) state permit relating to certain oil or gas operations, (viii) authorization to discharge to a POTW, or (ix) license, permit, regulation, or order issued pursuant to the Atomic Energy Act of 1954. (42 USC Section 9601(10)(K).)

g. **Baseline Conditions** Neither CERCLA nor the NCP use the term "baseline." The DOI regulations define "baseline" as the conditions that would have existed at the assessment area if the release of hazardous substances under investigation had not occurred. (43 CFR Section 11.14(e).) Restoration is then defined as returning an injured resource to baseline conditions, measured either by the resource's previous physical, chemical, or

biological properties, or by the services it previously provided. (43 CFR Section 11.72.)

h. Residual Injuries Neither CERCLA nor the NCP use the term "residual injuries". However, use of this term has arisen from the provisions in the DOI regulations which contemplate compensation for injuries to natural resources that have not been or nor are expected to be addressed, or mitigated, by response actions conducted pursuant to the NCP. (43 CFR Section 11.10, 11.15.) The injuries which remain after completion of remedial actions are termed "residual injuries." This term is used to distinguish from "lost use."

2. Hanford Specific Issues Re: Definitions (evaluation of these issues tabled for now)
 - a. Natural Resources
 - b. Releases
 - c. Injuries from other sources
 - d. Background Conditions

II. POLICY ISSUES: DEFINITIONS AND ANALYSES

A. GENERAL POLICY ISSUES

1. Trustee Responsibilities - DOE and others [KL, JD]

CERCLA requires trustees to assess damages, collect from PRPs for those damages, and use the funds collected to restore damaged natural resources. There is little guidance on what specific actions trustees must undertake to meet these CERCLA requirements. (The NCP and DOI regulations set out optional actions that trustees may undertake in pursuing their duties.) What is the range of actions that might fulfill this statutory duty, and what are the legal and technical ramifications of undertaking the various actions identified within this range?

2. Multiple Roles [KL]

DOE is a trustee, lead agency and site owner/operator. Does this multiplicity of roles present an irreconcilable conflict of interest such that DOE cannot simultaneously perform all three roles? If it does, what should/can DOE do? If it does not, does it present a lesser conflict, or appearance of conflict, which still must be acknowledged and managed? If so, how can DOE best manage it to reduce the conflict and the appearance of conflict? If it does not present a conflict, how can DOE best communicate this to other parties?

Ecology is both a trustee and lead agency for the cleanup. Is there an irreconcilable conflict of interest in both

dictating the terms of the cleanup and assessing damages for natural resource injuries? If so, what should/can Ecology do? If not, can or should Ecology still take action to reduce the conflict or appearance of conflict?

3. DOI Regulations [FM, JD]

What are the steps involved in following the DOI regs? Would DOE benefit from the rebuttable presumption? What other benefits might be gained by following the DOI regs? What are the likely advantages/disadvantages of not following the DOI regs?

4. Compensable Values (Non-use damages, Unique v Common Resources, Site Access) [FM, JD]

DOE-HQ has advocated that non-use damages not be allowed at all in NR damage claims at this time, that there should be no compensable nonuse loss during the period the public is unaware or is otherwise unaffected by a release, that nonuse damages should not attach for temporary resource injuries or for injuries to common resources with many substitutes. Should RL adopt these assertions as RL policy? What effect would such a policy have at Hanford?

5. Multiple causation injuries (non-release damages, e.g., roads) [JD]

Can a trustee recover for natural resources damaged by, e.g., roads, site construction, operations, and "cleanup activities" that are not direct results from a release? If so, what is the basis for recovery, and what are the limits? Is there a basis for tracing out the effects of releases into the remediation of those releases? If so, is there any limit to this "tracing"? How do coexisting causes of injury affect DOE's potential liability? How does the existence of background levels of chemicals and radiation affect DOE's liability?

6. Injuries caused by others [KM, GB, JD]

Should DOE attempt to investigate whether injuries may have been caused to natural resources at Hanford by PRPs other than DOE? Can it be done? What are the likely benefits to DOE?

7. Integration of NR values into other programs [KL]

Can RL integrate NR values into RCRA/CERCLA response actions? What are the likely benefits to DOE? (the how-to is not really a policy issue, so much as an action item, and can be evaluated when we get to action items)

8. Natural Resource Management [KL]

Does CERCLA require or authorize DOE to manage natural resources? If not, is there other authority which requires or authorizes such management? What is the extent of such requirements or authority? How does it relate to CERCLA section 107(f)? What are the likely benefits to DOE of undertaking a broad natural resource management program?

9. Balancing Risk [GB]

Are there legal or technical requirements or guidelines that dictate how DOE must balance ecological risk with public and worker health risk? If there are no applicable requirements or guidelines, does DOE have or can DOE develop a methodology for balancing risk with respect to environmental decision making. Should some type of decision process be used (i.e., Decision Tree Analysis)?

CERCLA Reauthorization (evaluation of this issue tabled pending determination of whether RL can still make comments)

How do the provisions of the Administration's proposal for CERCLA reauthorization affect any of the issues being address by the Working Group?

B. HANFORD SPECIFIC POLICY ISSUES

1. Baseline [FM, SF, GB]

A measurement of damages is the amount required to return the injured natural resources to baseline conditions. Does that mean the conditions that would currently have existed at Hanford had there been no DOE facilities, i.e., agricultural uses? Does it mean conditions that existed in 1941? In 1980? Current conditions (i.e., heavy industrial development) but without the releases? If a release occurred before 1980, is the baseline 1980 or can it be earlier?

2. Timing/Prioritization [NL/ER]

Are there scheduling priorities inherent in NR evaluations that should be considered? Is there a basis for deciding to do NR evaluations at a particular point in time? RI/FS and D&D work is underway at the site. How can NR issues be inserted into these ongoing processes? What other factors impact the timing of NR work? Does site cleanup take precedence over NR assessments?

3. Exclusions (pre-post 1980, NEPA, permits) [FM, GB, JD]

Should DOE seek to avail itself of any or all of the exclusionary provisions? Which one(s)? What are the benefits to DOE? What are the disadvantages? Is there any conflict of interest if DOE as the o/o of the site uses the exclusionary provisions to protect itself from claims by trustees? If so, how can this be resolved?

4. Trustee involvement/coordination [KL, FM]

What is DOE required to do to involve or coordinate with other trustees? What are the benefits/disadvantages of doing more?

5. Native American Issues (treaty/cultural/religious) [KL]

How do the various definitions of "trust responsibilities" effect the relationship between the tribes and DOE regarding NR? Of what relevance are the terms of the treaties? Are tribal trustee rights created or limited by the treaties? Are NR injuries defined by the terms of the treaties or solely by CERCLA? Do the treaties define which resources are managed by each tribe? Is there a basis for considering religious, cultural or archeological resources under CERCLA Section 107? Is there other authority on this issue?

6. Land Use/Site Access [GB]

Do future land use decisions impact natural resource liability? Does past (and future) inaccessibility of the site impact NR liability (including use and nonuse values)? How?

7. Level of analysis and documentation needed [SF, GB]

What alternatives are available? What level of analysis and documentation is required for DOE to fulfill its trustee responsibilities? What would be the advantages/disadvantages (including potential legal liabilities) to the alternatives?

8. Non-trustee stakeholders - potential interaction [KL, FM]

Is there any requirement or authority for involving non-trustee stakeholders in the natural resource assessment process? What are the advantages/disadvantages?

9. "Credits" for preserving natural resources [GB]

Had the federal government not taken control of the Hanford Reservation, continued farming and development might have significantly reduced the quantity and quality of natural resources at the site. Can DOE gain any credit for preserving a large portion of the Hanford site in a natural condition and/or otherwise preserving or promoting the natural resources?

**10. Injuries to natural resources off the Hanford Site
[RW]**

Is DOE required/does DOE have the authority to assess injuries to natural resources off the Hanford Site? Are there advantages/disadvantages to doing such assessments?

C. HANFORD TECHNICAL ISSUES [NL/ER, SF, GB]

1. Unit of Analysis

What are the advantages/disadvantages to analysis of NR at various unit levels: OU vs aggregate area vs site wide. What is required under CERCLA response action provisions? What is required by the TPA? how can the preferred NR unit of analysis be integrated and coordinated with the unit of analysis required to comply with CERCLA response actions?

2. Physical Effects v Effects of Releases

How can DOE distinguish between physical disturbance effects (remediation, stabilization, etc.) and effects of a release.

3. Measure of Injury

DOI regs define injury as a specific change in the physical or chemical quality of the resource or the exceedance of oil or hazardous substance concentrations beyond certain levels or in amounts that cause certain adverse changes in the viability of the resource. Will DOE use the DOI regs to determine injury. Does DOE have another methodology that is acceptable. Is it different from the Risk Assessment Methodology? How will the two methodologies be integrated or can they be integrated?

4. Remediation Effects

How will DOE determine the remediation effects? In the evaluation, what will be the relevant considerations (i.e., technical feasibility, cost vs. benefits, cost effectiveness, impact of response, natural recovery, etc.)

5. Cumulative Releases

How will they be assessed. What will the relevant considerations be (i.e., incremental effects, Time crowded perturbations -- one system has not had enough time to recover from effects before the next one occurs, Space crowded perturbations -- actions are so close in space that the areas within which they can induce effects overlap, indirect effects?)

III. ACTION OPTIONS

1. Program Level
 - a. Trustee Responsibilities
(assessment/restoration/compensation options)
 - b. Cost minimization/integration
 - c. Timing/Prioritization
 - d. Trustee involvement/coordination
 - e. Non-trustee stakeholder interaction
2. Procedures
 - a. Dual Roles (DOE org, stakeholder, HQ; Ecology)
 - b. Assessment options (Preassessment Screen, Risk Assessments, Unit of Analysis, Remediation effects, Other Source effects, physical effects, etc.)
 - c. Methods to minimize costs, integrate
 - d. Effects on Operations
3. Documentation
 - a. Resources/jurisdiction (unique v common)
 - b. (Cumulative) Releases
 - c. Background/Baseline (Pre-post 1980)
 - d. Remediation Effects
 - e. "Injuries" from other causes/sources (physical effects, site access, offsite effects, releases by others)
 - f. Exclusions
 - g. Records (policies, programs, procedures, findings, decisions, actions)

IV. RECOMMENDATIONS

- A. POLICY AND TECHNICAL ISSUES
- B. ACTION OPTIONS